

MAMMOMAT 300/1000/3000/3000 Nova

SP

Service

Replacement of parts

Compression plates

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English

Doc. Gen. Date: 12.04

Print No.: SPB7-230.841.01.05.02

Replaces: SPB7-230.841.01.04.02

Chapter	Page	Revision
all	all	05

Document revision level

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General

These instructions describe how to replace and adjust the plastic trays and the frames on the MAMMOMAT 300/1000/3000/3000 Nova.

These instructions are valid for **the plastic trays listed below** and for **the rubber spring kit** (part No. 65 76 172).

- In cases of Mammomat 300/1000/3000/3000 Nova with all serial no.

Article	Part no.
Spot frosted old	64 20 991
Spot clear new	64 14 119
Stereo	63 96 548
Biopsy	64 14 143
Shadow cross	63 96 993

- In cases of Mammomat 1000/3000/3000 Nova from serial no. > 7000 **or**, if below, then in cases when upgraded with AEC (part no. 64 83 783)

Article	Part no.
18 x 24	64 83 809
24 x 30	64 83 817
18 H	64 83 833
24 H	64 83 841
Axilla	64 83 825
Mag 1.5	64 83 858
Mag 1.8	64 83 866
18 H Flexible	65 76 065
24 H Flexible	65 76 024

- In cases of Mammomat 300/1000/3000 with serial no. 6999 or lower and **not** upgraded with AEC (part no. 64 83 783)

Article	Part no.
18 x 24	63 97 348
24 x 30	64 14 085
18 H	65 61 091
24 H	65 61 117
Axilla	64 14 101
Mag 1.5	64 14 127
Mag 1.8	64 14 135
18 H Flexible	65 76 131
24 H Flexible	65 76 149

Tools required

A standard tool kit, including Allen keys.

Torque screwdriver with range of approximately 10 - 100 Ncm, e.g.

- "Torque screwdriver - 65 950/8, 10-80 Ncm", material number 080 79 241 (see Service Tools Catalogue).
- Procure the necessary bit/insert in a local hardware store, see Fig.1.

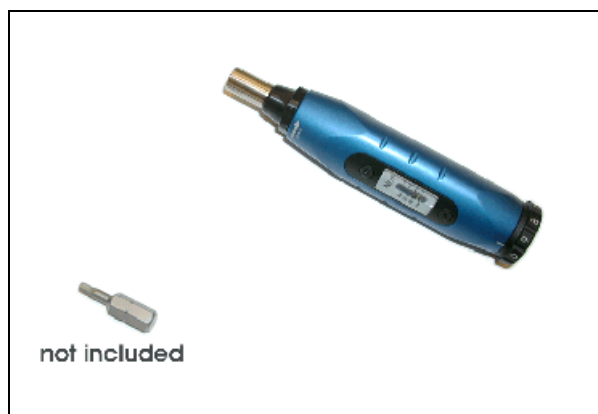


Fig. 1 Torque screwdriver

Time required

Approximately 1/2 hour for 1 person.

Parts included

Plastic trays with frame

Article	Part No.	Tray	Frame	Screw	Washer or bush- ing (Fig.2, chapt. 2)	Label	Adhesive gauge block	Instruction (this docu- ment)
18 x 24	64 83 809 or 63 97 348	1	1	4	4	1	-	1
24 x 30	64 83 817 or 64 14 085	1	1	4	4	1	-	1
18 H	64 83 833 or 65 61 091	1	1	4	4	1	1	1
24 H	64 83 841 or 65 61 117	1	1	4	4	1	1	1
Axilla	64 83 825 or 64 14 101	1	2	4	4	1	-	1
Mag 1.5	64 83 858 or 64 14 127	1	1	4	4	1	-	1
Mag 1.8	64 83 866 or 64 14 135	1	1	4	4	1	-	1
Stereo	63 96 548	1	1	4	4	1	-	1
Biopsy	64 14 143	1	1	4	4	1	-	1
Shadow cross	63 96 993	1	1	4	4	1	-	1

Spot plastic trays

Article	Part No.	Tray	Threaded bushing	Screw	Washer	Label	Gasket	Instruction (this docu- ment)
Spot frosted old	64 20 991	1	-	2	6	1	-	1
Spot clear new	64 14 119	1	2	2	2	1	1	1

Flexible plastic trays

Article	Part No	Tray	Instruction (this document)
18 H Flexible	65 76 065 or 65 76 131	1	1
24 H Flexible	65 76 024 or 65 76 149	1	1

The Rubber spring kit - 065 76 172 - for flexible plastic trays shall contain:

Item number	Name, description	Material number	Number of pieces	Remark
1	Rubber spring bushing (Gummi Federbuchse)	6576123	5	1 pc as reserve, if damaged during assembly
2	Nut, (serving as axle)	6576073	4	
3	Bolt, (Screw)	6576081	4	
4	Washer, outer dia 25, inner dia 6.8, and thickness 1 mm;	6616259	4	
5	This Repl. instruction, (SPB7-230.841.01.04)	(6608066)	1	

Replace the plastic tray

Plastic tray with frame, former version, unmodified.

NOTICE

When replacing the plastic tray, always replace the frame as well.
(The new frame is delivered with the new plastic tray.)

1. Loosen the four screws (1/Fig. 1) and remove the plastic tray from the frame.

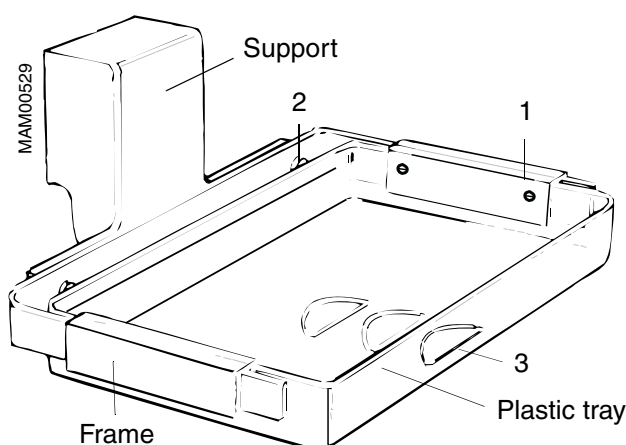


Fig. 1

2. Loosen the two Allen screws (2/Fig. 1) and remove the frame from the support.
3. Fit the new frame to the support and fasten with the two Allen screws (2/Fig. 1) and washers.
4. Then fit the new plastic tray to the frame and fasten with four new screws (1/Fig. 1) and washers, but do not screw tight.

NOTICE

Check that the plastic tray is correctly inserted regarding the AEC detector markings (3/Fig. 1).

Plastic tray with frame, newer version, modified.

In order to improve the reliability of the plastic trays some frame fixations have been modified.

In the first step the fixation of the plastic trays, material number 64 83 809 and 64 83 817 were modified, the four screws (1/Fig. 1) are being led inside of special plastic bushings (Fig. 2). These bushings have to be inserted from inside of the tray, their collar staying inside (see Fig. 3)

CAUTION

Correct torque.

If torque is out of tolerance, either the fixation will be weak or the bushings will get damaged.

Tighten all 4 screws by a torque of $0.45 \text{ Nm} \pm 10 \%$.

The exchange procedure is self explanatory following the description above.

NOTE

In future there may be other material numbers from the table "Plastic trays with frame" delivered with such plastic bushings.

In such cases follow this part of the instruction.

Strictly adhere to prescribed value of the tightening torque.

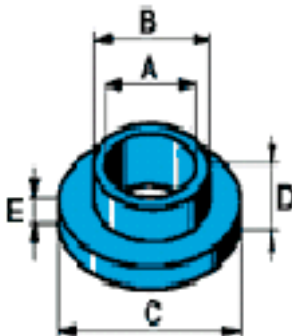


Fig. 2 Huese_Bushing



Fig. 3 DSCF 0014

Spot plastic tray

1. Loosen the two screws (1/Fig. 4) and remove the plastic tray.
2. Fit the new gasket (2/Fig. 4) (clear spot only).

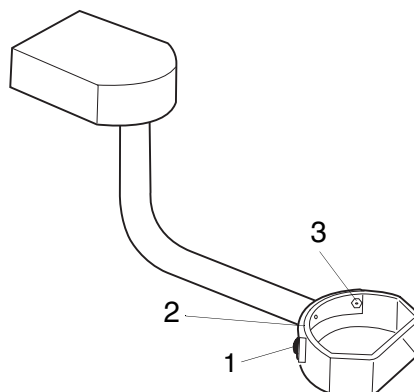


Fig. 4

3. Fit the new plastic tray with new screws and washers. For clear spot fit the threaded bushings (3/Fig. 4).

Flexible plastic tray and rubber springs

NOTICE

When replacing the flexible plastic tray, always replace the rubber springs, nuts, bolts and washers, as well. (Actually the entire kit should always be replaced, the used materials properly disposed off.)

1. Loosen the four screws and nuts (1 and 3 / Fig. 5) and remove the plastic tray from the frame.

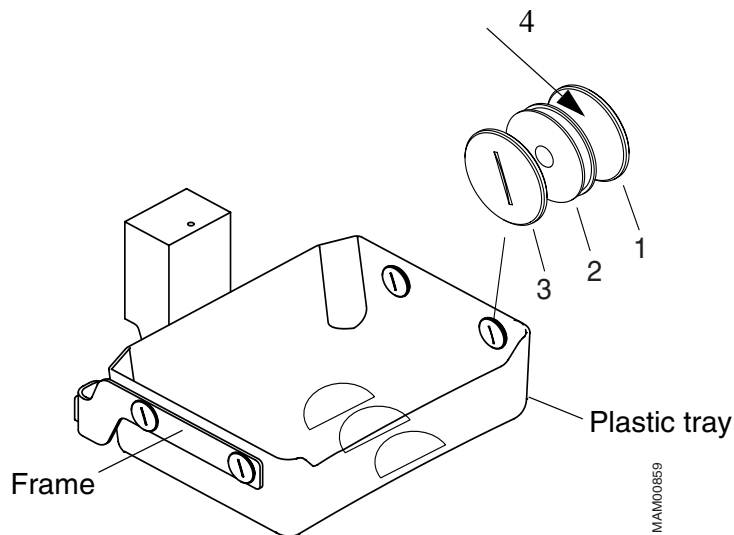


Fig. 5

2. Fit the four new rubber springs (2/ Fig. 5) to the new plastic tray. Make sure the rubber springs are properly positioned. (One rubber spring is delivered as reserve, if damage by fitting it into the hole should occur.)
3. Fit the new plastic tray to the frame on the support and fasten it with the four new screws and nuts (1 and 3/ Fig. 5). Do not forget to insert one washer 066 16 259 **each** between the outer collar of the rubber spring and the inner part of the frame (as indicated by the arrow 4 / Fig. 5). The washers are meant to prevent unprotected rubbing of the spring on painted inner surface of the support frame in case of **flexible** compression plates.

NOTICE

When the screws are tightened there is still a small gap between the frame and the plastic tray. This is to allow for the tray to move slightly up and down. (It is a "Flexible compression plate"!)

Attach the identification label

NOTICE

The instructions on this page apply to all compression plates with the exception of flexible compression plates.

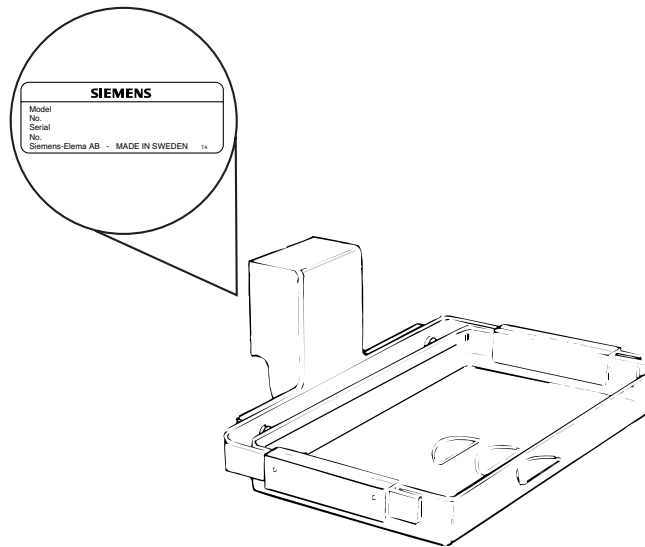


Fig. 6

1. Remove the old identification label (Fig. 6) and dispose of it.
2. Attach the new identification label in place of the old one.

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Final check and adjustment of the compression plate

After replacing a plastic tray, the compression plate must be checked and adjusted.

Flexible compression plates and spot compression plates do not need further adjustment.

Low edge compression plate

NOTICE

The instructions on this page only apply to low edge compression plates (18 x 24, 24 x 30, Axilla, Mag 1.5 and Mag 1.8).

1. Attach the compression plate to the compression unit (ensure that the compression plate is fully inserted).
2. Place a non-compressive object, for example a 10 - 20 mm thick Plexiglas plate, on the object table. The plate must cover the object table.
3. Lower the compression plate to the Plexiglas plate. Apply a compression force of 3 - 5 kg. The plastic tray will now adjust itself so that it lies flat against the Plexiglas plate. Before tightening the four screws, check the alignment of the compression plate and the object table at the front edge (chest-wall side) (Fig. 1). Adjust by displacing the plastic tray, if necessary. Tighten the screws.

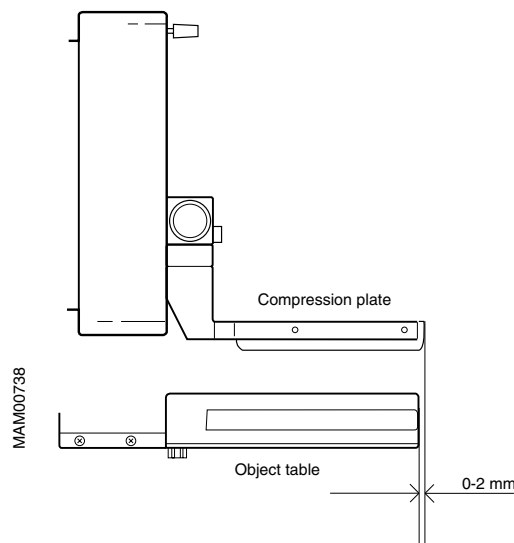


Fig. 1

High edge compression plate

NOTICE

The instructions on this page only apply to high edge compression plates (18 H and 24 H).

This adjustment is necessary to ensure that the front edge does not show on the film.

1. Attach the compression plate to the compression unit (ensure that the compression plate is fully inserted).
2. Place a non-compressive object, for example a 10 - 20 mm thick Plexiglas plate, on the object table. The plate must cover the object table.
3. Lower the compression plate to the object table. Apply a compression force of 3 - 5 kg. The plastic tray will now adjust itself so that it lies flat against the Plexiglas plate. Attach the adhesive gauge block to the front of the object table (chest-wall side). Make sure the piece is perpendicular to the object table and laterally placed at the center of the compression table (1/Fig. 2).
4. Raise the compression unit and adjust the compression plate so that the bottom and the center fits the adhesive gauge block when a compression force of 3 - 5 kg is applied (2/Fig. 2).
5. Tighten the four screws.
6. Remove the adhesive gauge block.

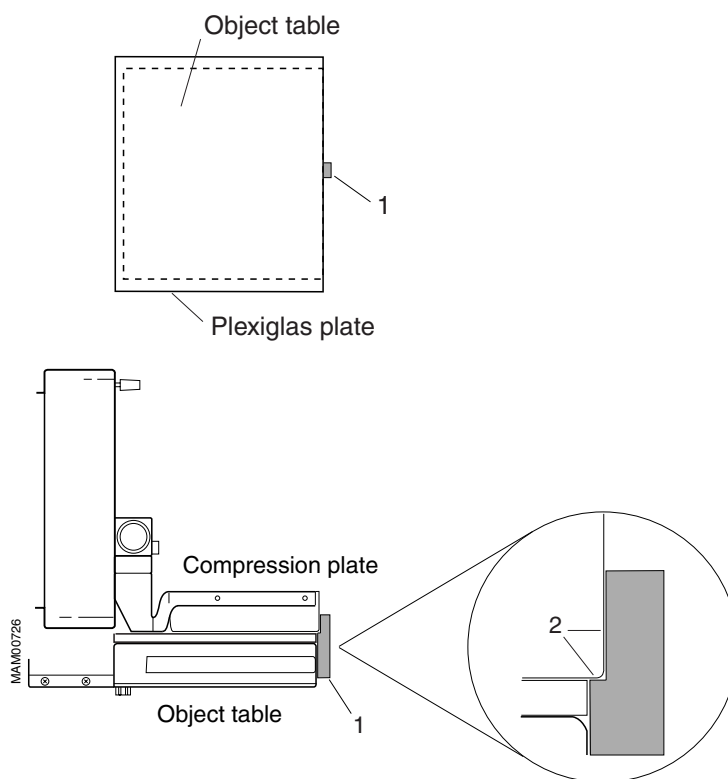


Fig. 2 View from above, from one side and a section

Chap. 1 and 2 Revised

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